

A THREE-YEAR PROGRAM EVALUATION, 2016-17 TO 2018-19
May 2020



ABSTRACT

This report completes a three-year (2016-17, 2017-18, and 2018-19) quasi-experimental evaluation of the fidelity of implementation of the Capturing Kids' Hearts program and its impact on two outcomes, teacher-student relationships and student behavior within the Wake County Public School System (WCPSS). Findings from focus groups, teacher self-assessments, and classroom observations from Capturing Kids' Hearts schools and comparison schools suggest that Capturing Kids' Hearts is not being implemented consistently. Statistical significance tests show no difference in the desired outcomes between the intervention and comparison schools. These findings may be attributed to the fact that many WCPSS schools use similar strategies that fall under different names. In light of these results, the authors discuss implications for practice and policy within the district.

TABLE OF CONTENTS

INTRODUCTION	4
BACKGROUND	6
METHODS	9
RESULTS	11
How are teachers implementing Capturing Kids' Hearts, and how does this compare to "business as usual" at comparison schools?	11
Greeting Students	12
Good Things or Connection Activities	13
Social Contract or Behavioral Expectations	13
Four Questions, Hand Signals, and Other Student Behavior Management	14
Launch	15
Does Capturing Kids' Hearts have an impact on teacher and student relationships and student behavior?	19
Relationships and Behavior Outcomes	19
CONCLUSIONS AND RECOMMENDATIONS	22
ENDNOTES	26
REFERENCES	27
APPENDICES	28



INTRODUCTION

During the 2016-17 school year a small number of schools within the Wake County Public School System (WCPSS) began implementing Capturing Kids' Hearts. This report completes a three-year study (2016-17, 2017-18, and 2018-19) which shows the fidelity of Capturing Kids' Hearts implementation within 11 WCPSS schools, and analyzes and compares the expected outcomes between those schools with pre-implementation data and their matched comparison schools. Two research questions of interest are:

- 1) How are teachers implementing Capturing Kids' Hearts, and how does this compare to "business as usual" at the comparison schools?
- 2) Do the three-year outcome analyses of the Capturing Kids' Hearts intervention show an impact on teacher-student relationships and student behavior? That is, is there a discernible difference between these outcomes at Capturing Kids' Hearts schools and the comparison schools?

Our study uses descriptive and quasi-experimental research designs. As such, the findings will facilitate district leaders' decisions about programmatic adjustments to schools currently implementing Capturing Kids' Hearts. Moreover, the quasi-experimental research design allows us to generalize the study's findings to schools that have similar demographic profiles to the Capturing Kids' Hearts schools so leadership can make data-based decisions regarding the feasibility of program expansion.

Table 1
Conclusions supported by this study's research design

Research Design	Conclusions
□ Experimental	We can conclude that the program or policy caused changes in outcomes because the research design used random assignment.
☑ Quasi-Experimental	We can reasonably conclude that the program or policy caused changes in outcomes because an appropriate comparison strategy was used.
☑ Descriptive☑ Quantitative☑ Qualitative	These designs provide outcome data for the program or policy, but differences cannot be attributed directly to it due to lack of a comparative control group.

Data Source: List, Sadoff, & Wagner (2011) and What Works Clearinghouse (2014)



BACKGROUND

Capturing Kids' Hearts is a set of processes developed by the Flippen Group (2016a) intended to create healthy relationships between adults and youth and to support high-achieving learning environments. It is designed to strengthen students' connection to school by 1) increasing protective factors including positive character development, strong bonds with teachers, and consistently enforced behavioral agreements and 2) decreasing risk factors such as inappropriate behavior and poor social coping skills (Holtzapple et al., 2011). According to the Flippen Group (2016b), Capturing Kids' Hearts aligns with Bandura's (1977) Social Cognitive Theory of Learning which argues that behavior is dynamic and dependent on a person's beliefs and environment. Bandura argues that people must believe that they can successfully master behaviors, increasing self-efficacy before they can acquire them. Then, behaviors are acquired through observing and imitating the behaviors of others and through self-regulation (Perry, Baranowski & Parcel, 1991). Following this theoretical framework, schoolwide implementation of Capturing Kids' Hearts consists of several strategies, collectively referred to as the EXCEL Model strategies, used by K-12 classroom teachers:

- greeting students at the door with a handshake
- asking students to share good things in their lives
- having students create a social contract for expected classroom behavior
- posing four questions to redirect behavior
- using and encouraging students to use non-verbal hand signals to redirect behavior
- ending the class on a powerful note or *launch*

The existing research on Capturing Kids' Hearts is minimal—it includes a small randomized control trial (RCT) conducted by the Flippen Group (Holtzapple et al., 2011). Although RCT studies are typically considered the "gold standard" for evidence of effectiveness, this study does not fully meet the U.S. Department of Education's (2016) recommendations for strong evidence because it is based on a small sample of eight high schools which restricts its generalizability to other school settings.

WCPSS' first core belief states that "Every student is uniquely capable and deserves to be challenged and engaged in relevant, rigorous, and meaningful learning each day" (Wake County Public School System, n.d.). To transform this belief into a reality, it is important that WCPSS teachers deliver core instruction and build relationships with students to help reduce learning barriers. The Flippen Group believes that strong relationships are critical to learning and they market Capturing Kids' Hearts as an initiative that promotes student engagement in positive relationships with each other and their teachers. WCPSS chose to implement this initiative as an effort to build positive relationships between teachers and students as a means of improving the culture of learning at eight elementary schools, two middle schools, and one high school. Figure 1 illustrates the expected implementation and outcome goals of Capturing Kids' Hearts within those schools.

Figure 1
Capturing Kids' Hearts Pathway of Change

Strategies Implementation Short-Term Long-Term Outcomes Outcomes Provide two days Teachers use the Strengthen students' Improve school of training for all EXCEL Model connection to school culture and student teachers. strategies: (relationship-building) learning. by: Train selected Greeting teachers at each Students Increasing school to be protective factors Good Things Process such as strong Champions to bonds with Social support teachers. Contracts implementation. Decreasing risk Four Questions factors such as inappropriate Hand Signals behavior and poor coping skills. Launch

To initiate schoolwide implementation, schools and/or districts contract with the Flippen Group (2016b) to provide training to teachers and administrators. For an additional cost, each school has the option of training a few teachers as Process Champions who serve as mentors and facilitate implementation. Contracts with the Flippen Group may also include fees for a school visit and online or phone-call implementation support.

The district's federally funded Title I program budget has been the primary funding source for implementation within WCPSS. Local funds appropriated from the district's Eastern Area budget covered most of the remaining costs. Using these two sources, the district invested roughly \$750,000 in program implementation over the three-year period. As Table 2 shows, the district incurred the majority of expenditures for Capturing Kids' Hearts in 2016-17, with a sharp spending decrease by 2018-19.

- In 2016-17, \$615,750 covered training expenses for 14 schools (11 included in our study) and for approximately 200 Central Service administrators (see Appendices Table A-1 for a list of the 14 funded schools and the 11 included in our study). Typically, costs associated with Capturing Kids' Hearts are highest during a school's first year of implementation because that is when the bulk of program training occurs.
- Costs were considerably lower in 2017-18, amounting to \$106,200 for 13 schools that had
 lower training costs during their second year of implementation. The other school that
 was originally funded by Title I and local funds applied school redesign funds to support
 implementation (not included in the 2017-18 total). In addition, no Central Service training
 occurred.
- In 2018-19, \$24,000 covered the second-year training costs for one school (not included in our study because the school opened in 2017-18).

Table 2
WCPSS spent nearly \$750,000 on Capturing Kids' Hearts over 3 years

	Federal Title I	Local	Total
2016-17	\$493,200	\$122,550	\$615,750
2017-18	\$78,200	\$28,000	\$106,200
2018-19		\$24,000	\$24,000
			\$745,950
	2017-18	2016-17 \$493,200 2017-18 \$78,200	2016-17 \$493,200 \$122,550 2017-18 \$78,200 \$28,000

Data Source: WCPSS Title I Department and the Eastern Area.

Note: The cost for the initial training session for 50 participants is about \$21,000, plus \$400-450 for each additional participant (not to exceed 60), in addition to travel expenses for the facilitator billed at a rate of \$1,000 for one-day events, \$1,500 for two-day events, and \$1,800 for three-day events. School redesign funds are not included in totals.



METHODS

This study utilized descriptive data to measure implementation of the Capturing Kids' Hearts intervention during the 2016-17, 2017-18, and 2018-19 school years and applied a quasi-experimental research design to compare outcomes between intervention and comparison schools across the same years. We - the authors of this study - used a statistical technique to match comparison schools to intervention schools, first comparing the individual student-level variables within all possible school-level matches, and then, from that pool, selecting schools that were most similar to the Capturing Kids' Hearts schools. District leaders chose to implement the program during one elementary school's first year of operation, so 10 of the 11 Capturing Kids' Hearts schools in this study had pre-implementation data (2015-16) on which to match 10 comparison schools. Our examination of the schools before and after the matching procedure found that they were well balanced in terms of school-level pretest outcomes, percentages of students from economically disadvantaged households, suspensions, and membership counts.

We used the following data sources to answer our research questions:

- In 2016-17, we asked staff from the Data, Research & Accountability (DRA) Department to help us facilitate a total of 17 focus groups at 11 Capturing Kids' Hearts schools with principals and small random samples of teachers and students to assess the fidelity of implementation.
- In 2017-18 and 2018-19, we asked teachers at the Capturing Kids' Hearts schools to complete an implementation self-assessment each spring. Almost 300 teachers participated in the spring of 2018 and about 450 teachers responded in the spring of 2019.
- In 2017-18, DRA staff also helped us conduct short classroom walk-throughs at the 11 Capturing Kids' Hearts schools and 10 comparison schools to observe teacher and student engagement. Overall, DRA staff visited approximately 100 classrooms at the intervention schools and 100 at the comparison schools.
- Finally, we used teacher-student relationship and student behavior data collected from 2015-16 through 2018-19 to conduct multi-level analysis of impact on the 10 intervention schools with pre-implementation data and their matched counterparts.



RESULTS

HOW ARE TEACHERS
IMPLEMENTING CAPTURING KIDS'
HEARTS, AND HOW DOES THIS
COMPARE TO "BUSINESS AS
USUAL" AT COMPARISON
SCHOOLS?

Within the 2017-18 WCPSS Teacher Survey, 572 teachers and 122 instructional coaches at all Capturing Kids' Hearts schools responded to questions about the Capturing Kids' Hearts training. Of those respondents, 91% told us they received training led by the Flippen Group with an average of five teachers and/or instructional coaches per school attending the training for Process Champions. During the focus group discussions, many principals and teachers shared positive feedback about the training sessions and said that they want training for all school staff (not just teachers and administrators), timely training for newly-hired teachers, and refresher training sessions throughout the year.

Nevertheless, convergent findings from focus group interviews, teacher self-assessments, and classroom observations suggest that overall Capturing Kids' Hearts schools have not consistently and fully implemented the *EXCEL Model* strategies, especially at the middle and high schools. Upon checking for variation in implementation across schools, no single school stood out as an example of full implementation of all program components. In addition, the employed *EXCEL Model* strategies do not appear distinctly different from the "business-as-usual" strategies that comparison schools used in their efforts to build relationships and positive school cultures.



Greeting Students

Within 10 of the 11 focus group interviews conducted in 2016-17, teachers at Capturing Kids' Hearts schools stated that they like greeting students at the door and believe this to be an effective strategy for connecting with students. Teachers mentioned that greeting students is a great way to start the day and helps them tune into how the students might be feeling. Students at Capturing Kids' Hearts schools often said that they like this practice and that it makes them feel welcomed, however, some students perceived the practice to be inauthentic and others said that their teachers don't greet them at all. Based on Capturing Kids' Hearts self-assessment survey results collected in the spring of 2018 and 2019, almost all teachers reported greeting students with a pleasant tone and welcoming body language (>97%). Teachers

also reported that they typically greet students by name (about 95% for elementary and approximately 90% for middle and high school teachers, each year).

During classroom observations conducted in 2017-18, DRA staff noticed that school personnel at Capturing Kids' Hearts schools as well as comparison schools were generally welcoming to students and to staff, with a few exceptions. DRA staff observed some type of morning greeting at each of the eight Capturing Kids' Hearts elementary schools and each of the seven comparison elementary schools, though there was more consistency at some schools than others. Similar greetings, teachers saying, "Good Morning" and speaking with students about how they were doing, occurred at elementary Capturing Kids' Hearts schools and the elementary comparison schools.



Greetings were also common at the two Capturing Kids' Hearts middle schools and the high school's Freshman Academy but not at the middle and high school comparison sites. Contrary to teachers' self-assessment results, the observations at the Capturing Kids' Hearts schools did not consistently show teachers greeting students by name, although this practice occurred more than what was observed at the comparison



schools. It was rare to see teachers at both the Capturing Kids' Hearts and comparison schools greet students with a hand shake or other gesture, except at one elementary comparison school that was implementing the Leadership Model Program based on *Covey's 7 Habits of Highly Effective People*² where teachers and students consistently shook hands.



Good Things or Connection Activities

Teachers at Capturing Kids' Hearts schools expressed positive feelings about giving students the opportunity to share their Good Things in class within nine of the 11 focus groups. Overall, they felt that the practice helps them get to know their students. Their students' feelings were more variable. For instance, buy-in of this practice appears to be better at the elementary level, where students said it makes them feel good and special. At the middle and high school levels, however, students described it as something silly or uncomfortable. The majority of elementary, middle, and high school teachers at Capturing Kids' Hearts schools (>75% in spring of 2018 and 2019) reported that they typically invite students to share Good Things and ask them follow-up questions.

Within the Capturing Kids' Hearts schools, DRA staff observed the Good Things activity in at least one classroom at seven of the eight elementary schools and one middle/high school. During the vast majority of these observations, teachers engaged with students during this activity by asking follow-up questions or practicing active listening. Comparison school teachers used similar activities to connect and engage with students at five of the seven elementary schools and at one school at the middle/high school level. These activities were more diverse across teachers than the more standardized implementation of Good Things at the Capturing Kids' Hearts schools, yet they appeared to serve the same purpose. For instance, teachers might have given students time to share personal stories that were related to the topic of instruction.

Social Contract or Behavioral Expectations

At six of the 11 focus groups, mostly at the elementary level, teachers in Capturing Kids' Hearts schools identified the Social Contract as effective in building student accountability and ownership. They also discussed the importance of revisiting the Social Contract and modifying it throughout the year. Students talked about the Social Contracts in their classrooms which might include declarations such as "be kind," "follow directions," or "listen when others are speaking" as well as other statements related to respect and kindness. Nearly all teachers at the 11 Capturing Kids' Hearts schools reported that they developed a Social Contract with their students and posted it in a prominent place in the classroom (>95% in spring of 2018 and 2019). These teachers were less likely to report that they use the contract, however. Each year, about 80% of the elementary school teachers said they



refer to the Social Contract when a student is violating it, and slightly smaller percentages responded that they ask for feedback concerning how well the class is abiding by it (73% in spring of 2018 and 64% in spring of 2019). At the middle and high school level, considerably lower percentages of teachers reported using these strategies each year (about half refer to the contract when it is violated and about one third ask for feedback about it).



Classroom observations data corroborated the presence of Social Contracts as DRA staff saw them posted consistently in classrooms throughout all but one of the Capturing Kids' Heart schools. Classrooms within seven of these schools (five of the elementary and two of the middle/high schools) displayed Positive Behavioral Interventions and Supports (PBIS) behavioral expectations in addition to the Social Contracts. PBIS is a framework for using interventions and its systems and structures of behavioral expectations and consequences promote positive school climates and strong teacher-student relationships. DRA staff did observe a couple of teachers reviewing the Social Contract to either frontload expectations or redirect student misbehavior. Five of the eight Capturing Kids' Hearts elementary schools

had discipline plans or consequences posted in most of their classrooms which related to either Capturing Kids' Hearts or PBIS. At one elementary school, it appeared to be part of the school culture for students to greet classroom visitors and ask them to sign the Social Contract. When asked to explain the Social Contracts, students almost always described them as the class rules that students were expected to follow or else there would be a consequence. DRA staff did not see consequences posted at the Capturing Kids' Hearts middle and high schools.

At the comparison schools, DRA staff noted PBIS behavioral expectations displayed throughout six of the elementary schools and all three middle and high schools. There were also a few examples of social contracts and additional classroom rules. None of the comparison schools had posters displaying consequences for misbehavior.

Four Questions, Hand Signals, and Other Student Behavior Management

Capturing Kids' Hearts teachers in 10 of the 11 focus groups discussed the Four Questions as the most challenging EXCEL Model strategy. They said that it takes time away from instruction and that it does not always work, especially for students who repeatedly exhibit problem behaviors. The vast majority of students who participated in the focus groups could articulate the consequences at their schools, which usually included the Four Questions. Implementation of this strategy appeared to be inconsistent as the students frequently mentioned that some teachers used it and others did not. In the spring of 2018 and 2019, about two thirds of Capturing Kids' Hearts elementary school teachers reported



that they typically ask the Four Questions. Among middle and high school teachers in 2018, 41% stated that they generally ask the Four Questions, and this percentage rose to 47% in 2019, although the increase was not statistically significant.

Another challenging strategy mentioned by teachers at nine of the 11 Capturing Kids' Hearts schools is the hand signals, called "checks" and "fouls." Teachers discussed the ineffectiveness of this practice in lower grades where it can get overused as well as in the upper grades where students think it is "uncool." Across the grade spans, the teachers and students gave examples of how the use of the hand signals can be too aggressive. Within each of the Capturing Kids' Hearts self-assessment surveys we asked teachers about their use of non-verbal signals for classroom management, which could be interpreted as "checks" and "fouls" and/or the teacher's hand-signal to refocus students' attention. In the spring of 2018 and 2019, most elementary school teachers (90% and 85%) reported using non-verbal signals whereas each year about half of middle and high school teachers did so (they were moving in a positive but not statistically significant direction across the years).

When observed during a typical school day, Capturing Kids' Hearts and comparison school students were generally on-task and seemed comfortable interacting with each other and their teachers. DRA staff noticed very few student behavioral issues. When the situation warranted it, teachers at both Capturing Kids' Hearts and comparison schools used a variety of strategies, including hand signals, to gain students' attention or manage behavior. DRA staff saw a few teachers at Capturing Kids' Hearts

schools asking the Four Questions, although there were also instances when teachers did not use this strategy to redirect student behavior.

Launch

At Capturing Kids' Hearts schools, there was very little discussion about the Launch within the focus groups and very few opportunities to observe its application during classroom visits. Elementary teachers' practice of ending the class on a powerful note appears to have moved in a positive, albeit not statistically significant direction between the spring of 2018 and 2019 (48% and 57%, respectively). A much higher percentage of the middle and high school teachers reported using this strategy (about 70% each year). Similarly, DRA staff did note that teachers closed with a Launch in each of the classrooms observed at the high school implementing Capturing Kids' Hearts.

Visual summaries of the findings from the diverse data sources are presented below (see Tables 3 and 4 and Figures 2 and 3). More extensive details can be seen in Tables A-2 to A-4 (Appendix A).



Table 3 In 2016-17, teachers reported more positive perceptions of Capturing Kids' Hearts implementation than students

EXCEL Model Strategies	Teacher Perceptions	Student Perceptions
Greeting Students	Effective	Mixed views on effectiveness
Good Things	Effective	Mixed views on effectiveness
Social Contract	Effective	Less effective
Four Questions	Less effective	Less effective
Hand Signals	Less effective	Less effective
Launch	Very little discussion of this strategy by either group	

Data Source: Teacher Focus Groups at 11 Capturing Kids' Hearts Schools and Student Focus Groups at four Capturing Kids' Hearts Schools (2 elementary, 1 middle and 1 high), 2016-17

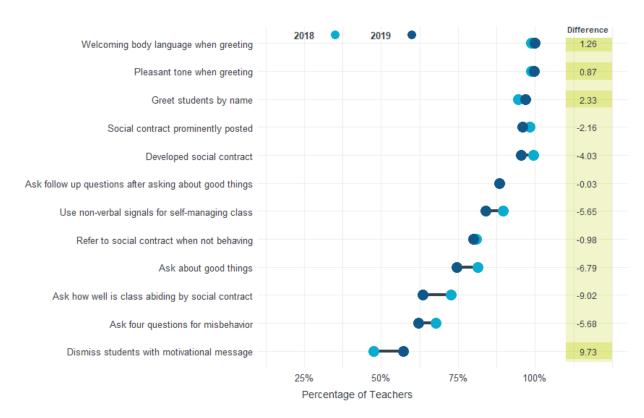
Table 4
In 2017-18, teachers within both groups of schools used similar strategies, yet use was inconsistent

EXCEL Model or Similar Strategies	Capturing Kids' Hearts Schools approx. 100 classrooms	Comparison Schools approx. 100 classrooms
Greeting Students	Moderately consistent	Moderately consistent
Good Things or Connection Activities	Moderately consistent	Moderately consistent
Social Contract and/or PBIS		
Behavioral Expectations Displayed	Consistent	Consistent
Behavioral Consequences Displayed	Inconsistent	None
Four Questions, Hand Signals, or Other Student Behavior Management	Moderately consistent	Moderately consistent
	Inconsistent	Very few opportunities to view
aunch or dismissal	 very few opportunities to view 	
	 seen only at the high school 	

Data Source: Classroom Observations at Capturing Kids' Hearts Schools (8 elementary, 2 middle and 1 high) and Comparison Schools (7 elementary, 2 middle and 1 high), 2017-18



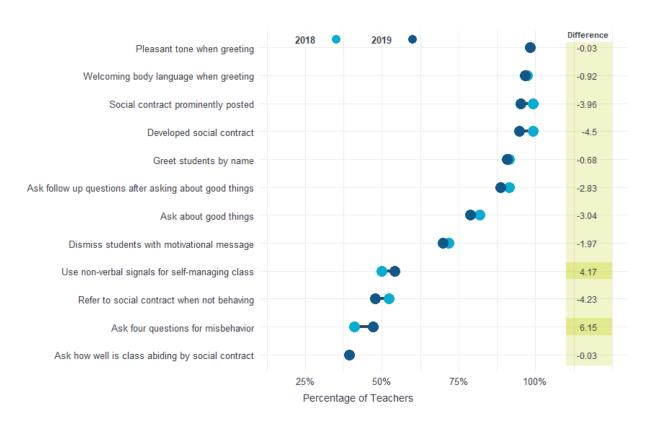
Figure 2
Elementary teachers' self-assessment results indicated no improvement in implementation of Capturing Kids' Hearts between the spring of 2018 and 2019



Note: Difference indicates the percentage point difference in teachers who reported that they always/ almost always or often implement the various EXCEL Model strategies based on the results of our survey conducted in spring of 2018 and spring of 2019. Green highlights show positive changes across the years. None of the differences were statistically significant.



Figure 3
Middle and high school teachers' self-assessment results indicated no improvement in implementation of Capturing Kids' Hearts between the spring of 2018 and 2019



Note: Difference indicates the percentage point difference in teachers who reported that they always/ almost always or often implement the various EXCEL Model strategies based on the result of our survey conducted in spring of 2018 and spring of 2019. Green highlights show positive changes across the years. None of the differences were statistically significant.



DOES CAPTURING KIDS' HEARTS HAVE AN IMPACT ON TEACHER AND STUDENT RELATIONSHIPS AND STUDENT BEHAVIOR?

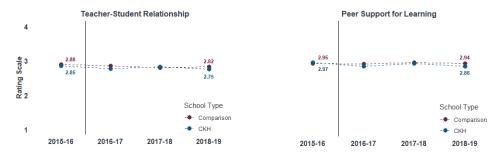
Findings from student and teacher surveys and records of student suspensions suggest that schools implementing Capturing Kids' Hearts have reported levels of student relationships and behavior that are no different than comparison schools implementing other programs. Over time, these two groups of schools have shown similar trends in these outcomes.

Relationships and Behavior Outcomes

Capturing Kids' Hearts intends to strengthen students' connection to school by increasing students' protective factors such as strong bonds with teachers and decreasing their risk factors such as inappropriate behavior and poor coping skills. These outcomes should in turn improve the school culture. Measures for this study included districtwide survey data based on 1) student reports of their relationships with teachers and peer support for learning³ and teacher reports of student self-management skills⁴ as measures of protective factors and behavior and 2) school suspension rates as measures of risk factors. Analyses did not reveal any programmatic impact on the desired outcomes, as illustrated in Figures 4-6. Additional analyses were conducted to examine whether there were any program effects for various subgroups, but none were found.

Teacher and student survey results reported before (2015-16) and after implementation show little change among the various outcomes. Mean ratings of student perceptions of relationships with their teachers and peer support for learning were not different between Capturing Kids' Hearts schools and comparison schools. No detectable differences were found for teacher reports of student relationships and self-management skills at Capturing Kids' Hearts and comparison schools. Likewise, both Capturing Kids' Hearts schools and the comparison schools have shown a downward trend in short-term and long-term suspensions, with no statistically significant difference between the groups' suspension rates. The district implemented other programs and initiatives to reduce suspensions during the same time frame of this study, which may have contributed to the overall decline seen at both sets of schools.

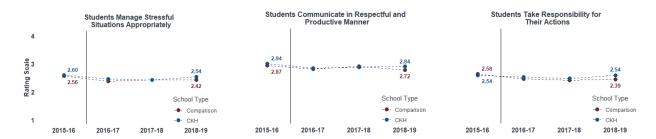
Figure 4
According to students, relationships have not improved over time



Data Source: Student Engagement Instrument Results, 2015-16 to 2018-19

Note: 2015-16 represents baseline data before 2016-17 implementation of Capturing Kids' Hearts. No statistical difference between groups or by race/ethnic subgroups.

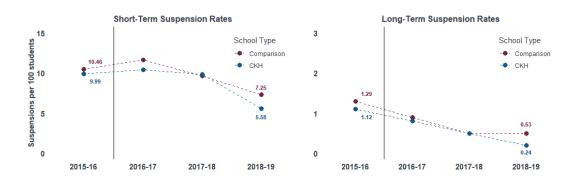
Figure 5
According to teachers, student behavior has not improved over time



Data Source: North Carolina Teacher Working Conditions Survey and WCPSS Teacher Survey Results, 2015-16 to 2018-19

Note: 2015-16 represents baseline data before 2016-17 implementation of Capturing Kids' Hearts. Two Capturing Kids' Hearts schools and one comparison school had teacher response rates below 33% on the teacher survey in 2018-19; thus, responses do not reflect the schools' teachers' perceptions overall. No statistical difference between groups.

Figure 6
Suspensions have declined at both Capturing Kids' Hearts and comparison schools over time at a similar rate



Data Source: WCPSS Student Incident Report System, 2015-16 to 2018-19

Note: 2015-16 represents baseline data before 2016-17 implementation of Capturing Kids' Hearts. No elementary students received long-term suspensions. No statistical difference between groups or by race/ethnic subgroups.



CONCLUSIONS AND RECOMMENDATIONS

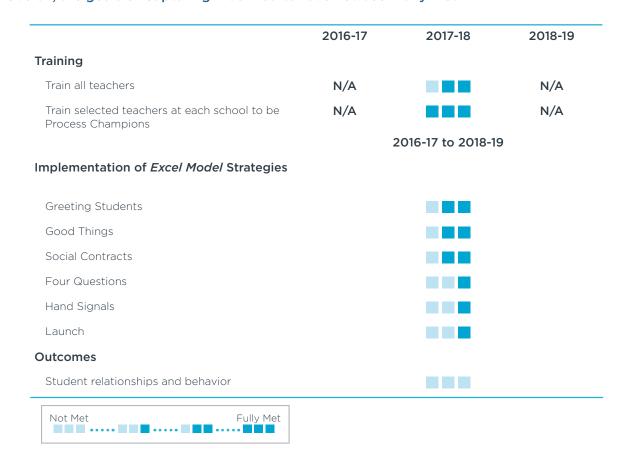
The findings of this three-year study suggest that Capturing Kids' Hearts is not being implemented to complete fidelity. Convergent results from focus group interviews, teacher self-assessments, and classroom observations imply that some EXCEL Model strategies have become a greater part of the school culture than others. For instance, teachers appear to be more effectively and consistently greeting students, listening to students share their Good Things, and posting Social Contracts in the classroom than they are managing behavior through the use of Social Contracts, the Four Questions, and Hand Signals. This could be because Greetings, Good Things, and posting Social Contracts are strategies that are more straight-forward and easier to implement than the others. Elementary schools appear to have more fully implemented the EXCEL Model strategies than middle and high schools in part because teachers perceive these strategies to be more appropriate for elementary students, particularly the lower grade levels. This perception was a common theme heard during focus group discussions with Capturing Kids' Hearts teachers.

To date, the goals of Capturing Kids' Hearts have not been fully met. As shown in Figure 7, the implementation of **all** *EXCEL Model* strategies appears to be an area in need of improvement. We checked for variation in implementation across the schools and found that implementation results were largely similar across schools. Elementary schools' levels of implementation were very

similar to each other as were the middle and high schools, with little significant improvement over the course of our study. Our investigation of teacher training in 2017-18 indicated that each school had Process Champions in place who could spearhead school implementation, revitalize current staff, and train new staff; therefore, teacher turnover should not have been a primary reason for lower than expected implementation levels.

Figure 7

Overall, the goals of Capturing Kids' Hearts have not been fully met



Note: N/A indicates that data were not collected that year. Goal status ratings ranging from "Fully Met" to "Not Met" visually represent the general extent to which implementation and outcomes have been achieved as evident in the findings synthesized from all data sources and analyses applied within the study.

Analyses were not able to detect a statistically significant effect of the Capturing Kids' Hearts program, which could suggest that either the program had weak or negligible impact on the measured outcomes or simply that many WCPSS schools use similar strategies that fall under different names and which produce similar results. Social and emotional learning (SEL) is an umbrella for prosocial skill development and various types of educational interventions such as character education, conflict resolution, and bullying prevention (Humphrey et al., 2011;



Social and Character Development Research Consortium, 2010). The strategies, goals, and outcomes of these SEL interventions may be comparable to the Capturing Kids' Hearts EXCEL Model framework. Although the EXCEL Model strategies are distinctly named, the intentions underlying these strategies may not be inherently unique to the program. They tend to resemble other SEL interventions and what is considered to be "business as usual" at the comparison schools. For example, elementary schools are generally places in which teachers greet students, encourage students to share personal stories and make connections, and create expectations and positively manage student behavior. Overall, our Capturing Kids' Hearts and comparison elementary schools fit this description. Teachers at Capturing Kids' Hearts middle and high schools, however, more consistently greeted students than their counterparts; otherwise the school environments were very similar.

The two groups of schools may also look similar because Capturing Kids' Hearts has not been implemented to a level that would generate a difference and/or because other SEL programs are also being implemented in both Capturing Kids' Hearts and comparison schools. According to principals, in addition to implementing Capturing Kids' Hearts in 2017-18, all but one school were implementing or beginning to implement PBIS, three schools were implementing Character Education, and at two schools, counselors provided SEL training to teachers and support to students. Nine of the 10 comparison schools were implementing PBIS, two schools were participating in a relationship-building program called The Positivity Project⁵, one school was using the Leadership Model Program, and one school was providing other SEL support to students. Given this list of SEL programs, it is not

surprising that this study did not find a distinct impact of Capturing Kids' Hearts on relationships, behavior, and the school culture in general. As such, we did not further investigate how these outcomes might impact student learning because any differences could not be attributed to program implementation.

Our analysis was based on a sample size that may not have been large enough to detect slight differences between the two groups. The small number of schools (10 implementing Capturing Kids' Hearts and 10 comparison schools) did not generate effect sizes that were sufficient enough to show important differences between those implementing the program compared to those implementing other best practices and strategies. Additionally, our data measuring outcomes do have limitations. The district administers the Student Engagement Instrument (Betts et al., 2010) each spring to measure several domains that serve as outcome measures to various program interventions; however, prior to 2018-19 (when the district moved to surveying students in grades 3-12) schools were only required to survey students in grades 5, 8, and 9. In 2017-18, several WCPSS schools did not participate in the survey (including one of our study schools). As such, data prior to 2018-19 reflect one grade level within the school not groups of students participating in specific programs nor the entire school population.

Ultimately, this study's findings of limited implementation and no discernable differences in outcomes between Capturing Kids' Hearts schools and comparison schools can likely be attributed to many WCPSS schools using similar strategies resulting in similar outcomes. The district is seeking to adopt programs and strategies that are



backed by strong evidence and preferably, do not overlap with similar programs already being implemented. The findings presented in this report coupled with the relatively high cost of Capturing Kids' Hearts compared to other SEL-related initiatives offer no support for starting implementation at additional schools within the district, yet there appears to be no harm in continuing implementation at current schools. Accordingly, we offer the following recommendations:

Recommendation 1: Continue implementation at current schools and dialogue with Capturing Kids' Hearts principals and teachers to identify potential barriers to consistent and authentic use of all *EXCEL Model* strategies and offer support to improve the fidelity of schoolwide implementation for schools.

Recommendation 2: In lieu of Capturing Kids' Hearts expansion, investigate less costly initiatives that have the potential to or already show evidence of promoting teacher and student relationships, keeping in mind those which are already being implemented in WCPSS. Also, consider that some initiatives may be more appropriately geared toward elementary students than middle and high school students and vice versa.

Recommendation 3: Continue support for SEL data collection instruments to use throughout the district to better support strategic decision-making around those types of initiatives.





ENDNOTES

¹ The cluster-randomized trial (CRT) provides unbiased estimates of the intervention's impact. In a CRT, randomization occurs at the cluster, in this case school-level, allowing all students in the school to participate in the schoolwide program, which makes it possible to be confident that the intervention and control schools are equivalent in expectation of receiving the treatment. This study uses the CRT design procedure for matching comparison schools to intervention schools. To see details, contact us for the Technical Report at:

wcpssdataaccountab@wcpss.net

² The Leadership Model Program develops leadership in young children. Using Stephen Covey's 7 Habits of Highly Effective People, students learn and practice integrity, initiative, work ethic, cooperation, confidence, and community service.

³ Within the Student Engagement Instrument (Betts, Appleton, Reschly, Christenson, & Huebner, 2010), students answer questions about relationships and peer support on a scale ranging from 1 to 4 (3 and 4 indicate positive views).

⁴ Within the Teacher Surveys, teachers respond to statements about students based on the same four-point scale.

⁵ The Positivity Project builds positive relationships by giving teachers the training, strategies, and resources to teach positive psychology's 24 character strengths.

REFERENCES

- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Betts, J.E., Appleton, J.J., Reschly, A.L., Christenson, S.L., Huebner, E.S. (2010). A study of the factorial invariance of the student engagement instrument (SEI): Results from middle and high school students. *School Psychology Quarterly*, 25(2), 84-93.
- Flippen Group. (2016a). *Capturing Kids' Hearts 1 Overview*. Retrieved from https://flippengroup.com/wp-content/uploads/2016/09/CKH1_Flyer.pdf
- Flippen Group. (2016b). Research FAQ. Retrieved from https://flippengroup.com/wp-content/uploads/2016/02/Research_FAQ_Flyer.pdf
- Holtzapple, C.K., Griswold, J.S., Cirillo, K., Rosebrock, J., Nouza, N., & Berry, C. (2011). Implementation of a school-wise adolescent character education and prevention program: Evaluating the relationships between principal support, faculty implementation, and student outcomes. *Journal of Research in Character Education*, 9(1), 71-90.
- Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Deighton, J., & Wolpert, M. (2011). Measures of social and emotional skills for children and young people: A systematic review. *Educational and Psychological Measurement*, 71(4), 617-637.
- List, J A., Sadoff, S., & Wagner, M. (2011). So you want to run an experiment, now what? Some simple rules of thumb for optimal experimental design. *Experimental Economics*, 14(4), 439–457.
- Perry, C.L., Baranowski, T., & Parcel, G.S. (1991). How individuals, environments and health behavior interact: Social Learning Theory. In K. Glanz, F.M. Lewis, & B. Rimer (Eds.) *Health behavior and health education*, San Francisco, CA.: Josey-Bass, Inc.
- Social and Character Development Research Consortium. (2010). Efficacy of schoolwide programs to promote social and character development and reduce problem behavior in elementary school children. Retrieved from https://ies.ed.gov/ncer/pubs/20112001/
- U.S. Department of Education. (2016). *Non-regulatory guidance: Using evidence to strengthen education investments.* Retrieved from https://ed.gov/policy/elsec/leg/essa/guidanceuseseinvestment.pdf
- Wake County Public School System. (n.d.). *Stategic plan: Vision 2020.* Retrieved from https://www.wcpss.net/strategic-plan.
- What Works Clearinghouse. (2014). WWC procedures and standards handbook, version 3.0. Washington DC: US Department of Education.



APPENDICES

Table A-1
Fifteen schools implemented Capturing Kids' Hearts and 11 were included in the study

	School	1st Year of Implementation	Included in Three Year Study
1.	East Wake High	2016-17	$\overline{\square}$
2.	Wendell Middle	2016-17	\square
3.	Zebulon Middle	2016-17	\square
4.	Beaverdam Elementary	2016-17	\square
5.	Knightdale Elementary	2016-17	\square
6.	Wakelon Elementary	2016-17	\square
7.	Zebulon Elementary	2016-17	\square
8.	Brentwood Elementary	2016-17	\square
9.	East Garner Elementary	2016-17	\square
10.	Lynn Road Elementary	2016-17	\square
11.	Wilburn Elementary	2016-17	\square
12.	Knightdale High	2015-16	Not included in study, implementation started in 2015-16. Used School Improvement Funds for implementation so not included in Table 2 of expenditures.
13.	East Wake Middle	2015-16	Not included in study, implementation started in 2015-16
14.	Creech Road Elementary	2016-17	Not included in study, implementation started late in 2016-17
15.	Rogers Lane Elementary	2017-18	Not included in study, implementation started in 2017-18



Table A-2 In 2016-17, teachers perceived the implementation of some Capturing Kids' Hearts strategies to be effective and some to be challenging

EXCEL Model Strategies		Supporting Statements and Quotes from Teachers	
Most Effective	Greeting Students	I like shaking their hand at the door every day because it starts us off with smiles. I sets the tone more positively in the classroom. It builds mutual respect.	
		It is good because you notice every child as they come in when before you may have not noticed if a child was having a bad day.	
		I like being at the door and greeting them because I get a sense of how they are that day and can feel them out for the day.	
	Good Things	Yes, they all want to talk, even those who usually don't talk.	
		I enjoy the sharing of good things because we get to know things about the student that we probably wouldn't know otherwise.	
		It gives us the opportunity to let them know we care. We get time to hear and share something about ourselves so they learn about us too.	
	Social Contract	The Social Contract is great with kindergarten students. I just have to point to it and they get it.	
		The Social Contract is most effective, however, it is necessary to revisit it throughout the year and perhaps rewrite it midyear.	
		The Social Contract is a great visual. The kids own it and know they need to follow it because they said they would.	
Least Effective or Most	The Four Questions	The questions take too much time and give attention to one student.	
Challenging		When you pull a child aside to ask the Four Questions, you lose the rest of the class.	
		If I put attention on one student then the next 20 will be doing the same and I'll be going around the room asking the Four Questions.	
		We get to that fourth question and they know there's not a consequence that mean anythingthey're laughing at us.	
	Hand Signals (Checks and	The fouls get overused which make students feel not part of a community. The younger kids use it, but the older kids would never.	
	Fouls)	The hand signals are elementary concepts.	
		In fifth grade it is uncool to check other students, so no one uses.	
		Middle school students have a difficult time buying into the hand signalsthey don't think they are cool.	
		The checking can turn into arguments.	
		Kids want to use the 'thumb signal' [check] in people's faces.	
		The checking can turn into arguments.	

Data Source: Teacher Focus Groups at 11 Capturing Kids' Hearts Schools, 2016-17



Table A-3 In 2016-17, students perceived the implementation of some Capturing Kids' Hearts strategies to be effective and some to be challenging

EXCEL Model	Strategies	Supporting Statements and Quotes from Students
Mixed	Greeting Students	It makes me feel good. It makes me feel like I'm welcome to be in the classroom.
Effectiveness		I feel like I'm very special because they're shaking my hand I feel like this is better to like greet someone.
		It makes me feel like I am going to have a good day.
		It is silly.
		It seems fake.
		Teachers don't do anything to make us feel welcome upon entering the classroon they simply take attendance and then get on with their lessons.
_	Good Things	You get to share with other people and other people get to share their good things and their good thing might be close to your good thing.
		When I say my good thing I just feel really good because I get to share the good things going on in my life.
		Sometimes I feel uncomfortable sharing because I feel it is not someone's business. It's stupid. There's nothing good to share.
		We're only allowed to share good things, but my life is all bad. That's okay. We should be allowed to share the bad things that happen to us, because those are the things that are funny, and what would make us bond as a class.
Least Effective or	Social Contract	Kids act the same way regardless of whether there's a piece of paper on the wall telling them how they're supposed to act.
Most Challenging		We used them a lot at the beginning of the year, but we barely talk about the social contract now.
		Teachers don't follow it.
		The kids don't pay attention to it.
_	The Four Questions	My teachers don't ask them, but they are on the board.
		Our teachers, they don't do the Four Question thing, they go right into the punishment.
		My class uses it. If someone gets in trouble, the teacher asks 'What are you doing? What are you supposed to be doing?'
		It is also on a poster on the wall.
_	Hand Signals (Checks and Fouls)	'Foul' means someone is being mean and 'check' means 'shush.' Check isn't used at all. If you get fouled, you have to say two nice things about the person wh fouled you. It makes you feel like you're in time-out, like you're still in kindergarten Most of the time some people use them for weapons.
	•	Most of the time I don't like them. We have 'tiny teacher' who calls on people to do Good Things, but sometimes they check people and hit people in the head.

Data Source: Student Focus Groups at Capturing Kids' Hearts Schools (2 elementary, 1 middle and 1 high school), 2016-17



Table A-4 In 2017-18, teachers within both groups of schools used similar strategies, yet use was inconsistent

	Capturing Kids' Hearts Schools (N=11) 8 elementary, 2 middle, 1 high school approx. 100 classrooms	Comparison Schools (N=10) 7 elementary, 2 middle, 1 high school approx 100 classrooms
Greeting	Moderately Consistent:	Moderately Consistent:
Students	Some type of morning greeting occurred at each of the 8 elementary schools. At 4 schools, teacher greetings occurred across all grade levels. Greetings varied by grade at the other 4.	 Some type of morning greeting occurred at each of the 7 schools. At 5 schools, teacher greetings occurred across all grade levels. Greetings varied by grade at the other 2.
	Greetings prevalent at the middle schools and the Freshman Academy at the high school.	Greetings not common at middle/high school.
	 At 3 of the elementary and 2 of the middle/high schools, the teachers regularly greeted students by name. 	 A few instances of teachers greeting students by name at the elementary level and none observed at the middle/high school.
	 A few elementary teachers shook hands with students or gave high fives or hugs. Several middle/high teachers used hand gestures, such as handshakes, fist-bumps, elbow-bumps, and high fives or gave hugs. 	 Several elementary and a couple of middle school teachers used hand gestures, such as handshakes, fist-bumps, elbow-bumps, and high fives or gave hugs.
Good Things	Moderately Consistent:	Moderately Consistent:
Or Connection Activities	 Teachers used Good Things in at least one classroom at 7 of the elementary schools and at 1 middle/high school. During the vast majority of observations, teachers engaged with students during this activity by asking students follow-up questions or practicing active listening. 	 Teachers used some type of activity to connect and engage with students at 5 of the elementary schools and at 1 middle/high school. The types of activities were more diverse compared to the implementation of Good Things as a Capturing Kids' Heart common practice.
Behavioral	Consistent:	Consistent:
Expectations Displayed	 Social contracts posted in classrooms throughout 7 of the elementary schools and all 3 middle/high schools. Some teachers also posted additional 	PBIS behavioral expectations posted throughout 6 of the elementary schools and all 3 middle/high schools. A few examples of Social Contracts and
	 PBIS behavioral expectations also displayed throughout 5 elementary and 2 middle/high schools. 	
	 A few teachers made reference to the Social Contract and at 1 elementary school student greeters asked DRA observers to sign it. 	
Consequences	Inconsistent:	None:
Displayed	Consequences posted throughout 5 elementary schools but not seen at middle/high schools.	 None of the comparison schools had posters displaying consequences for misbehavior.
Four	Moderately Consistent:	Moderately Consistent:
Questions, Hand Signals, and Student Behavior	 "Hand Signal" posters displayed and teachers used a time-out hand signal and other strategies to gain students' attention at 5 elementary schools and 2 middle/high schools. 	 Teachers used various strategies, including hand signals, to gain students' attention at 6 of the elementary schools but not seen at middle/high schools.
Management	 Few observations of students misbehaving. Some elementary teachers referred to the Four Questions or Social Contract to redirect behavior and others did not. No observations of students using "Checks" or "Fouls." 	 Few observations of students misbehaving. Teachers used a variety of techniques to handle behavior.



Anisa Rhea, Ph.D. and Malkeet Singh, Ph.D.

Data, Research, and Accountability Department Wake County Public School System Cary, North Carolina

Acknowledgements

The authors would like to acknowledge the contributions their DRA colleagues made to this report, specifically for their assistance conducting focus groups and classroom observations.